

WASHINGTON DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL CHECKLIST
(from WAC 197-11-960)

A. Background

1. Name of the proposed project, if applicable:

Klickitat County Wind Projects. This checklist addresses a proposed Windpower Leasing action covering four parcels in Klickitat County. The area addressed and evaluated for leasing under this checklist is comprised of four parcels totaling about 2000 acres. This SEPA action is only addressing the act of leasing by DNR. Subsequent permitting for the project will be through an environmental process by the proponent (lessee) through the appropriate county permitting process.

2. Name of applicant:

Washington State Department of Natural Resources

3. Address and phone number of applicant and contact person:

*Washington State Department of Natural Resources
713 Bowers Rd
Ellensburg, WA 98926
Contact: Toby McKay
Phone: (509) 545-8546 extension 6*

4. Date checklist prepared:

August 14, 2006

5. Agency requesting checklist:

Washington State Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

If the Department leases out the property for potential wind power development, the project would likely be planned in three phases: (1) completion of environmental and cultural resources studies associated with the permitting process and project feasibility determination, (2) construction of a wind power project, and (3) operation of the project. If the results indicate that wind power generation at the site is feasible, development of a wind power project would be pursued. Assuming financing and power purchase agreements are arranged, construction could commence in spring 2008 such that the project could be operational in late 2008 or later. The estimated operational life of the wind power project is 40 years or more.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

As discussed in response to item A.6, development plans depend on the results of permitting studies.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Environmental information regarding the three DNR parcels, including archaeological sites and protected or sensitive plant or animal species needing special consideration is available through DNR's TRAX information.

These parcels lie within the Klickitat County Energy Overlay Zone (EOZ) for which an EIS was completed. If leases are executed and before the project advances to construction of wind turbines, a field investigation of plants and wildlife in the site area would be conducted. The EOZ requires each applicant to submit an expanded SEPA checklist to include a completed environmental checklist supplemented by technical reports. The study will place emphasis on avian resources and bats. The site will also be surveyed for archeological and cultural resources. Consequently, an additional and more site specific SEPA review will occur prior to permitting for wind turbines, to address sensitive design elements.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by the proposal? If yes, explain.

We know of no other pending proposed projects that would affect the subject property.

10. List any government approvals or permits that will be needed for your proposal, if known.

The potential lease property is located within an area of Klickitat County that is zoned for Extensive Agriculture and has been included in the Energy Overlay Zone. This project is allowed in accordance with the land use and planning ordinances of the County. It's likely that the following permits would need to be secured.

Energy Facility Permit – Klickitat County

Building Permit – Klickitat County

Right of Way Permit and approach permits – Klickitat County

Construction Stormwater NPDES – Department of Ecology

Industrial Stormwater NPDES – Department of Ecology

Wind power development lease - Department of Natural Resources

Interconnection Agreement – Bonneville Power Administration

Hydraulic Project Approval – Department of Fish and Wildlife

Notice of Construction or Alteration - Federal Aviation Administration

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask

you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify the form to include additional specific information on project description.)

This checklist addresses the proposed leasing of four DNR managed (Common School Trust) parcels for Wind Power development. It's anticipated these parcels will be incorporated into one or more, large surrounding projects currently planned by Windy Point, Windtricity, The Last Mile Coop, Orion or other wind power development companies. If the state parcels are included in surrounding projects, state ownership will equal less than 5% of that total project.

There will be additional SEPA review prior to permitting of the entire projects. Road construction, wind turbine installation, substation construction, and specific locations and impacts will be considered during the permit phase of SEPA review.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The potential leases would be on Washington Department of Natural Resources land in Klickitat County, Washington. The legal descriptions for the property considered for lease are:

All, Section 36, Township 3 North, Range 14 E. W.M.

W1/2, SE1/4, Section 36, Township 3 North, Range 15 E. W. M.

All, Section 36, Township 4 North, Range 20 E. W.M.

E1/2SW1/4, SE1/4, Section 9, Township 3 North, Range 16 E. W. M.

The general locations and topography of the parcels are shown in the attached maps.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one): flat, rolling, steep slopes, other

The proposed lease sites vary from rolling to steep. The likely location of wind towers would be 0-10% slope.

- b. What is the steepest slope on the site (approximate percent slope)?

Estimated to be 65%

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The predominant surface soils on the site are silt loams with some cobbly silt loam and rock out crops.

- d. Are there any indications or history of unstable soils in the immediate vicinity? If so, describe.

No evidence.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Filling and grading will be required to improve existing dirt access roads, construction, construction of new service roads, turbine foundations and crane pads for erecting the wind turbine towers.

Gravel, crushed rock and other fill material will come from local operating sources, including existing quarries from landowners in the project area.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Activities such as clearing the turbine corridor, excavation and stockpiling of the rock material, construction of the roads, trenching for buried cables, and excavation for tower foundations create potential for soil erosion if there is substantial wind or rain. This portion of Klickitat county is a low precipitation area so the likelihood of a significant rain even is low. All roads and construction sites will be watered to mitigate wind erosion.

- g. About what percent of the site will be covered with impervious surfaces after project (for example, asphalt or buildings)?

<.5%

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The disturbance of vegetation and soil would be limited to the minimum necessary for project construction. Construction vehicle traffic would be limited to finished road surfaces as much as possible. Excavations would be backfilled and compacted as soon as practicable to minimize exposure. Disturbed areas not used for operation would be graded and seeded with appropriate grasses.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Air emissions during construction would be minor and would consist of vehicle emissions and fugitive dust from construction. There should be no emissions during project operation except those attributable to infrequent vehicular maintenance traffic.

- b. Are there any off-site sources of emissions or odor that may affect your proposal?

No.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The primary method that will be employed to control fugitive dust will be the application of water to areas vulnerable to wind erosion during the construction phase.

3. Water

- a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

There are no surface water bodies in the project construction area; however improvement of existing access roads or construction of new access or service roads may involve crossing small seasonal drainages.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

N/A.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground:

- 1) Will groundwater be withdrawn, or will water be discharged to groundwater?

Groundwater from existing water rights and wells could be used during construction for dust control and concrete for turbine foundations but we won't know that until a lease is awarded and a plan of development is approved.

There will be no discharge to groundwater.

If water is used for any purpose on the project, the lessee will be responsible to ensure that the use(s) are within the limitations of its water rights.

- 2) Describe waste materials that will be discharged into the ground from septic waste tanks or other sources, if any (for example domestic sewage; industrial, containing the following chemicals ... ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Sanitary wastes during construction will likely be managed through portable toilets serviced by an offsite vendor. There will be no septic systems installed on State land.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and methods of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Rainfall and snow melt are the only sources of runoff from the project site. Water will flow to the existing drainages and managed using best management practices.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

The nature of the project makes it unlikely that waste materials would enter either ground or surface water.

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

A storm water management plan and a storm water pollution prevention plan would be prepared for the project area prior to construction of the project. The plan would be prepared in compliance with the Department of Ecology construction storm water general permit and the storm water manual for eastern Washington.

Hazardous materials (e.g., paints, lubricants) will be controlled in closed containers; residuals will be disposed of offsite.

4. Plants

- a. Check the types of vegetation found on the site:

- ☐ deciduous tree: alder, maple, other
- ☐ evergreen tree: fir, cedar, hemlock, other
- ☒ shrubs
- ☒ grass
- ☒ pasture
- ☒ crop or grain
- ☐ wet soil plants
- ☐ water plants
- ☐ other types of vegetation

- b. What kind and amount of vegetation will be removed or altered?

In the project area the habitat contains grazed and ungrazed shrub steppe habitat and areas used for the production of dryland cereal grains and alfalfa. Locations where towers or roads are to be placed will cause disturbance and/or removal of vegetation but at this point the Department doesn't know where they would be sited.

- c. List threatened or endangered species known to be on or near the site.

The DNR TRAX records were reviewed. No listed threatened or endangered plant species are known to be on or near the site. Comprehensive field surveys will be conducted in advance of potential construction.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The cleared areas will be reseeded and then maintained in shrubs, forbs, and grasses.

5. Animals

- a. Identify any birds and animals which have been observed on or near the site or are known to be near the site:

birds: *crows, hawks, owls, songbirds, others*

mammals: *coyotes, bats, raccoons, squirrels, deer, rabbits, mice, others*

fish: *none*

- b. List any threatened or endangered species known to be on or near the site.

No listed threatened or endangered animal species are known to be on the site. Comprehensive field surveys will be conducted in advance of turbine construction to identify the occurrence of listed (federal and state) species and habitats.

- c. Is the site part of a migration route? If so, explain.

Unknown. Comprehensive field surveys will be conducted in advance of turbine construction to identify any migration routes or turbine impacts.

- d. Proposed measures to preserve or enhance wildlife, if any:

Impacts to wildlife will be minimized by using existing roads when possible and reseeding disturbed areas to native grasses.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

This project will be a net generator of electrical energy, however during construction equipment would use gasoline and diesel fuel.

- b. Would the project affect the potential use of solar energy by adjacent properties? If so generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

N/A.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

- 1) Describe special emergency services that might be required.

None anticipated.

- 2) Proposed measures to reduce or control environmental health hazards, if any:

Project operating procedures would likely include spill response plans and materials management. Plans will be retained onsite to respond to spills of petroleum product.

- b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The project sites are in rural areas. The Department knows of no ambient noises that affect the project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Construction activities would result in short-term noise impacts due to construction equipment (e.g., trucks, dozers, graders, cranes, portable generators). The hours of construction would likely be 7 a.m. to 6 p.m. and the duration of the construction activity is expected to be less than eight (8) months.

The operation of wind turbines produces some noise as turbine blades rotate through the air. Advances in turbine technology, including more efficient blade airfoils, have resulted in more of the wind energy being converted into rotational torque and less into acoustical noise than was the case with earlier designs. Turbine noise would be most noticeable at relatively low wind speeds because the noise associated with higher winds will mask the noise of the turbines. Noise modeling will be performed during the permit process to predict noise levels at various locations that are expected to result from project operation.

- 3) Proposed measures to reduce or control noise impacts, if any:

The project will be designed and operated to comply with state noise regulations found at WAC chapter 173-60. Turbines will be set back from property boundaries or incorporate features to minimize noise if necessary to ensure compliance with state noise regulations. In the event of excessive noise attributable to a turbine's mechanical failure (e.g. faulty gears, worn

blade brakes, out-of-balance rotor), the turbine will be removed from service and repaired. In the event of excessive noise attributable to a turbine's mechanical failure (e.g. faulty gears, worn blade brakes, out-of-balance rotor), the turbine will be removed from service and repaired.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties?

The primary use of the sites and adjacent properties is for grazing.. The area is also used for recreational activities.

- b. Has the site been used for agriculture? If so, describe.

The NW1/4 of Section 36, Township3, Range 15 and the E1/2SW1/4 of Section 9 Township 3 North, Range 16 E.W.M. is leased for dryland wheat and alfalfa production. It is unlikely that the farm ground would be impacted by a wind power lease due to its low elevation. The rest of the project area is in range.

- c. Describe any structures on the site.

None known

- d. Will any structures be demolished? If so, what?

No.

- e. What is the current zoning classification of the site?

The potential lease properties are located within an area of Klickitat County that has been included in the Energy Overlay Zone (EOZ). The EOZ permits wind turbines outright, subject to individualized review and imposition of conditions based on site specific information tailored to address project impacts in accordance with development criteria.

The current zoning is as follows:

*All, Section 36, Township 3 North, Range 14 E. W.M. Open Space
W1/2, SE1/4, Section 36, Township 3 North, Range 15 E. W.M. Extensive
Agriculture*

*All, Section 36, Township 4 North, Range 20 E. W.M. Rural Residential 2
E1/2SW1/4, SE1/4, Section 9, Township3 North, Range 16E. W.M. Extensive
Agriculture*

- f. What is the current comprehensive plan designation of the site?

Range and Agriculture

- g. If applicable, what is the current shoreline master program designation of the site?

N/A.

- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, explain.

We do not know of any "sensitive area" classification for the proposed site.

- i. Approximately how many people would reside or work in the completed project?

No one will reside on the State property. People will work on site to complete maintenance activities.

- j. Approximately how many people would the completed project displace?

None.

- k. Proposed measures to avoid or reduce displacement impacts, if any:

N/A.

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The wind energy project is compatible with current and projected land uses.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

- c. Proposed measures to reduce or control housing impacts, if any:

N/A.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Structure heights will be determined by the wind turbine design, which is to be selected through a competitive procurement process. The wind towers could be up to 265 feet tall plus the blade length for a total of up to 415 feet from ground level to the tip of the blade.

- b. What views in the immediate vicinity would be altered or obstructed?

Portions of the Columbia Gorge Scenic area could be within line-of-sight of 3 parcels proposed for leasing. Any potential impacts should be visually simulated to better understand impacts to aesthetic resources. The wind turbines will not block views from any vantage point; however they will alter the view of the ridge.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

All of the turbine towers will be of uniform design with smooth tubular steel structures that are painted off-white to blend with the sky. Lighting will be limited to aircraft warning lights.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No daylight glare is expected from the tower and turbine rotor structures. It is anticipated that aircraft avoidance lighting will be required. This will likely consist of one or more strobe lights in the daytime and one or more red flashing lights at night on each tower string in compliance with FAA regulations. Potential impacts associated with shadow flicker would be evaluated in detail in a project proposal.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

There will be no glare. The only lights will be those required to minimize aircraft safety hazards.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

N/A.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Bird watching and hunting may occur in the area.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

Not likely

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

N/A.

13. Historic and Cultural Preservation

- a. Are there places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None known

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site:

There are some archaeological sites listed on one of the sections. Comprehensive field surveys will be conducted in advance of turbine construction to identify potential issues.

- c. Proposed measures to reduce or control impacts, if any:

Impacts will be addressed on a case by case basis.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Access to the sites are by Dalles Mountain, Car Pool and Rattlesnake County roads (see attached maps).

- b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The site is not served by transit.

- c. How many parking spaces would the completed project have? How many would the project eliminate?

There would be no prescribed parking spaces. Construction workers would park in roadways and turnaround areas.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways?

Road design will be proposed by applicant and must be approved by the Department of Natural Resources.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

These transportation modes are not planned for delivery of construction materials.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Unknown – However its expected that transportation impacts would be greatest during the construction phase of the project. Construction equipment and materials will need to be transported to the site over a six to eight month period. The types of heavy equipment using the site roads during construction includes gravel trucks, concrete trucks, water trucks, and tractor-trailers hauling earthmoving equipment, cranes, electrical equipment, and turbine/tower components.

- g. Proposed measures to reduce or control transportation impacts, if any:

None

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

The project should not result in incremental demands for public services.

- b. Proposed measures to reduce or control direct impacts on public services, if any:

N/A.

16. Utilities

- a. List utilities currently available at the site (electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, etc.):

None known

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Unknown. To be bid by proponent

C. SIGNATURE

The above answers are true and complete to be best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: *Toby McKay*
by *mj* Date: 8/14/06
Tri-Cities Unit Land Manager

Reviewed by: *Mark Bohnet*
by *mj* Date: 8/14/06
Snake River District Manager

Approved by: *Milton D. Johnston* Date: 8-16-06
Assist. Reg. Mgr

Date submitted: _____

Attachments

General Location Map: *All, Section 36, Township 3 North, Range 14 E. W.M.*
Topography Map: *All, Section 36, Township 3 North, Range 14 E. W.M.*
General Location Map: *W1/2, SE1/4, Section 36, Township 3 North, Range 15 E. W.M.*
Topography Map: *W1/2, SE1/4, Section 36, Township 3 North, Range 15 E. W.M.*
General Location Map: *All, Section 36, Township 4 North, Range 20 E. W.M.*
Topography Map: *All, Section 36, Township 4 North, Range 20 E. W.M.*
General Location Map: *E1/2SW1/4, SE1/4, Section 9, Township 3 North, Range 16 E. W.M.*
Topography Map: *E1/2SW1/4, SE1/4, Section 9, Township 3 North, Range 16 E. W.M.*